ELSEVIER

AUTHOR INDEX FOR VOLUME 5

A
Anderson RH
(Letter to the editor) 173
Argao EA (*see* Kern MJ)

B
Benetos A (*see* Safar ME)
Bode W (*see* Stubbs MT)
Bodmer R 21
Brady HR 186
Brass LF 123
Burns JC 3

C
Canessa M 102
Carmeliet P 117
Castellino FJ 55
Chien KR 1
Clowes A (see Mattson E)
Collen D (*see* Carmeliet P)

D
Ditto WL (*see* Garfinkel A)

E
Esmon CT 141

F
Fishman GI (Tutorial) 211
Franz W-M (*see* Paul M)

G
Garfinkel A 76
Gebremedhin D (*see* Harder DR)
Giachelli CM 88
Gittenberger-de Groot AC
(*see* Noden DM)
Gittenberger-de Groot AC
(see Noden DM) (Letter reply)

H
Harats D 29
Harder DR 7
Harrington EO 193
Hoxie JA (*see* Brass LF)

K
Katz AM 37
Kern MJ 47
Kirshenbaum LA 230
Kozarsky KF 205

L
Liaw L (*see* Giachelli CM)
Lindahl AK 167
Lodish HF (see Schaffer JE)
Lohse MJ 63

M
Marotti KR (*see* Melchior GW)
Matsubara T (*see* Burns JC)
Mattson E 200
Mayadas TN 149
Melchior GW 83
Mulkins MA (*see* Harats D)
Muller WA 15

N
Narayanan J (*see* Harder DR)
Noden DM 69
Noden DM (Letter reply) 173

P
Papayianni A (see Brady HR)
Paul M 108
Poelmann RE (*see* Noden DM)
Poelmann RE (see Noden D)
(Letter reply)
Potter SS (*see* Kern MJ)

R
Ridker PM 225
Roman RJ (*see* Harder DR)

S
Safar ME 96
Schaffer JE 218
Schneider MD (see Kirshenbaum LA)
Schwartz SM (*see* Giachelli CM)
Schwarz HP (*see* Esmon CT)
Serhan CN (see Brady HR)
Sigal E (*see* Harats D)
Spano ML (*see* Garfinkel A)
Stone SR 134
Stubbs MT 157

T
Towbin JA 175

V
Vercellotti GM 128

W
Ware JA (see Harrington EO)
Weiss JN (*see* Garfinkel A)
Wilson JM (see Kozarsky KF)
Woolkalis MJ (*see* Brass LF)

©1995, Elsevier Science Inc., 1050-1738/95/$9.50 SSDI 1050-1738(95)00110-7

ELSEVIER

SUBJECT INDEX FOR VOLUME 5

A

Acetylcholine receptors, G-protein coupled muscarinic 63
Acquired heart disease in children 3
Adhesion molecules, gene knockout on 149
Adhesion molecules, mediating adhesion to luminal surface 15
Adhesive glycoproteins in cardiovascular lesions 88
Adipocytes, cardiac, fatty acid transport protein in 218
Adrenergic receptors, G-protein coupled 63
Amplification, PCR role (Tutorial) 175
Aneurysm formation, plasminogen/plasmin system role 117
Antagonists, thrombin receptor 123
Anticoagulation system, protein C role 55
Anticoagulatory processes, coagulation cascade role 157
Antiphospholipid antibodies block activated protein C function 141
Antithrombin, hemostasis maintenance role 157
Antithrombotics, new generation 134
Aortic sac region morphogenesis 69
Aortic valve calcification, osteopontin role in 88
Aorticopulmonary septum during outflow tract development 69
Apolipoprotein E deficiency, gene therapy for 205
Arachidonic acid, eicosanoids as oxygenated products of 186
Arrestin protein binding to phosphorylated receptors 63
Arteries and shape of blood pressure curve 96
Atherogenesis, lipoprotein(a) role 225
Atherogenesis, 15-lipoxygenase role 29
Atherogenesis, virus role 128
Atherosclerosis, cholesteryl ester transfer protein role 83
Atherosclerosis, 15-lipoxygenase role 29
Atherosclerosis, osteopontin role 88
Atherosclerosis, plasminogen/plasmin system role 117
Atherosclerosis, virus role 128
Automation, of PCR (Tutorial) 175

B

Backward waves and shape of blood pressure curve 96
Bacterial control circuits: lactose and tetracycline resistance operons 213
Ballooon angioplasty complications 200
β-adrenergic receptor kinase-1 role in heart failure 63
Binary systems: transactivators and repressors 213
Biodiversity, trafficking thrombin receptors 123
Blood, leukocyte emigration from into inflammation site 15
Blood clot dissolution, plasminogen/plasmin system role 117
Blood clot formation, protein C role 55
Blood flow, eicosanoid role in 186
Blood pressure curve shape and genetic hypertension 96
Bronchoconstriction, lipoxin inhibition of 186

C

Ca^{2+}, rise in intracellular, transduction of physical force by vascular wall via 7
Cancer, cardiac cell cycle role 230
Cardiac arrhythmias, chaos control of 76
Cardiac hypertrophy, red cell sodium–lithium countertransport role 102
Cardiac myocytes, terminally differentiated 37
Cardiogenesis genetic circuitry 47
Cardiomyopathy of overload 37
Caudal shift, outflow tract 69
cdk inhibitors, cardiac cell cycle role 230
Cell adhesion molecules, gene knockout on 149
Cell adhesion molecules, mediating adhesion to luminal surface 15
Cell differentiation, during outflow tract development 69
Cell growth, eicosanoid role in 186
Cell immigration, during outflow tract development 69
Cell origins and tissue boundaries during outflow tract development 69
Cell proliferation, cardiac cell cycle role 230
Cellular response mechanisms, to thrombin 123
Chaos control of cardiac arrhythmias 76
Children, acquired heart disease in 3
Children, Kawasaki disease in 3
Chimeric cardiologists: breeding genetic and cultural diversity in cardiovascular medicine 1
Cholesterol, LDL, atherogenic form 29
Cholesterol, plasma, in coronary artery atherosclerosis 83
Cholesteryl ester transfer protein role in HDL metabolism: insights from studies with transgenic mice 83
Classic transporter 221
Cloning, PCR role (Tutorial) 175
Clusters, hox and homeotic gene 21
Coagulation cascade, structure and specificity in and its inhibition 157
Coagulation factors, protein C domain regions similar to domain regions of 55
Coagulation factors, selective inactivation 141
Conditional transgene expression 211
Converting-enzyme inhibitors, in failing heart 37
Coronary angioplasty, new antithrombotics for 134
Coronary arteries, in atherosclerosis 83
Coronary arteries, during outflow tract development 69
Coronary heart disease, lipoprotein(a) role 225
Countertransport, red cell sodium–lithium, in essential hypertension 102
Covalent phosphorylation, of intracellular proteins 193
Cultural diversity, breeding in cardiovascular medicine 1
Cyclin-dependent protein kinases (cdks), cardiac cell cycle role 230
Cyclins, cardiac cell cycle role 230

©1995, Elsevier Science Inc.,
1050-1738/95/$9.50 SSDI 1050-1738(95)00111-5

Cytochrome P450 metabolites, of arachidonic acid, transduction of physical force by vascular wall via 7

D

Depressed contractility, in heart failure 37
Deterministic chaos, cardiac arrhythmias as instances of 76
Development, heart, 21, 47
Development, outflow tract 69, (Letter to the editor) 173, (Letter reply) 173
Development, thrombin receptor antagonist 123
Diabetic nephropathy, red cell sodium–lithium countertransport role 102
Diacylglycerol, action on momebrane-bound phospholipids 7
Diagnosis, PCR role (Tutorial) 175
Diapedesis, lipoxin inhibition of 186
Diastolic pressure, on blood pressure curve 96
Disseminated intravascular coagulation, TFPI for 167
Diversity, breeding, in cardiovascular medicine 1
DNA-binding proteins, gene expression role 47
DNA microinjection, role in hypertension research 108
DNA sequencing, PCR role (Tutorial) 175
Domain regions, protein C 55
Drosophila, homeobox genes in heart development 21, 47
Drug therapy, for inherited cardiac disease prevention 47
Dysmorphologies, outflow tract 69

E

E1A adenovirus, cardiac cell cycle role 232
Effectors, phosphorylation of 193
Eicosanoids, vascular roles for 186
Embryonic stem cells, role in hypertension research 108
Emigration, leukocyte, from blood into inflammation site 15
Endocardium, during outflow tract development 69
Endothelial cell adhesion, lipoxin inhibition of 186
Endothelial cells, P-selectin on 149
Endothelial injury, virus role 128
Endothelial injury, TFPI role 167
Endothelial surfaces, sequential interactions of adhesion molecules on 15
Energy starvation, in heart failure 37
Enveloping epicardium, during outflow tract development 69
Essential hypertension, red cell sodium–lithium countertransport role 102
Eukaryotic cells, LCFA uptake by 218

F

Facilitated diffusion transporter 222
Factor Xa, hemostasis maintenance role 157
Familial hypercholesterolemia, gene therapy for 205
Familial thrombophilia, protein C anticoagulant pathway role 141
Fasting, red cell sodium–lithium countertransport effect on 102
Fat, cardiac, LCFA uptake and release in 218
Fatty acid transport protein (FATP), LCFA uptake and metabolism role 218
Fatty acyl CoA esters 222
Fibrillation, chaos control of 76
Fibrin generation, thrombin role 134
Fibrinolysis, lipoprotein(a) role 225
Fibrinolytic system, evaluation in transgenic animals 117
Flippase 221
Forward waves and shape of blood pressure curve 96
Fourier analysis of blood pressure curve 96
Free fatty acids 222

G

Gene addition, role in hypertension research 108
Gene-deletion studies, role in hypertension research 108
Gene knockout on P-selectin: biology and function 149
Gene targeting, mice deficient in P-selectin 149
Gene therapy for hypercholesterolemic disorders 205
Gene therapy for inherited cardiac diseases 47
Genetic counseling for inherited cardiac diseases 47
Genetic determinants, lipoprotein(a) 225
Genetic diversity, breeding in cardiovascular medicine 1
Genetic engineering, protein C 55
Genetic hypertension, blood pressure curve shape role in 96
Genetic markers for hypertensive vascular disease study 96
Genetic switch in heart development 47
Genotypes, protein C 55
Glucose disposal, red cell sodium–lithium countertransport role 102
G-protein-coupled receptor kinases and the heart 63

H

Head, developing, during outflow tract development 69
Heart development, homeobox genes in 21, 47
Heart failure, β-adrenergic receptor kinase-1 role 63
Heart failure, converting-enzyme inhibitors in 37
Hemostasis, eicosanoid role 186
Hemostasis, plasminogen/plasmin system role 117
Hemostasis maintenance, coagulation cascade role 157
Heparin as antithrombotic 134
Heparin affinity of TFPI 167
Herpes viruses promote inflammation and thrombosis 128
Heterologous regulatory sequences, role in hypertension research 108
High-density lipoprotein (HDL), low levels in atherosclerosis 83
Hirudin™ as antithrombotic 134
Hirulog™ as antithrombotic 134
HOM-C cluster, homeotic gene, *Drosophila* 21
Homeobox genes, in heart development 21, 47
Homeostasis, Na^+ 102
Homeotic genes, HOM-C cluster, *Drosophila* 21
Homologous recombination role in hypertension research 108
Homozygous protein C deficiency, protein C treats 141
hox gene clusters, vertebrate, 21
Human protein C and activated protein C: components of the human anticoagulation system 55
Hypercholesterolemic disorders, gene therapy for 205
Hyperlipidemia, red cell sodium–lithium countertransport role 102
Hyperlipoproteinemia, type III, gene therapy for 205
Hypertension, essential, red cell sodium–lithium countertransport role 102
Hypertension, genetic, blood pressure curve shape role 96
Hypertension research, transgenic animal models for 108
Hypertrophy, overload-induced 37

©1995, Elsevier Science Inc., 1050-1738/95/$9.50 SSDI 1050-1738(95)00111-5

I
Inducible promoters 212
Inflammation site, leukocyte emigration into from blood 15
Inflammatory response, of atherosclerotic lesion 29
Inflammatory response, herpes virus role 128
Inflammatory response, P-selection role 149
Inherited cardiac diseases 47
Inhibitors, thrombin 134
Inotropic drugs for heart failure 37
Insulin resistance, hypertension with 102
Integrated differentiation, during outflow tract development 69
Interleaflet triangles, development (Letter to the editor) 173
Ion transport, eicosanoid role 186
Ion transport abnormalities, mediation through chronic insulin level elevation 102
Isoforms, G-protein-coupled receptor kinase 63
Isoforms, lipoprotein(a) 225

K
K^+ channels, buffering activation 7
Kawasaki disease: recent advances 3

L
Lactose resistance operons 213
Leukocyte adhesion molecule, gene knockout on 149
Leukocyte extravasation, in inflammatory processes 149
Leukocyte migration across vascular intima: molecules and mechanisms 15
Leukocyte recruitment and activation, eicosanoid role in 186
Leukotrienes, vascular roles for 186
Life expectancy, shortened, associated with overload- induced hypertrophy 37
Lifestyle modification for inherited cardiac disease prevention 47
Ligand-receptor-based systems 213
Lipid peroxidation by 15-lipoxygenase 29
Lipids, cholesteryl ester transfer protein role in shuttling 83
Lipids, red cell sodium–lithium countertransport role 102
Lipoprotein(a) and atherothrombic risk 225
Lipoprotein metabolism, paradigms of 205
Lipoproteins, cholesteryl ester transfer protein role in shuttling 83
Lipoxins in "stop programs" of host defense and inflammation 186
15-Lipoxygenase, in atherogenesis 29
Long-chain fatty acid (LCFA) uptake: molecular mechanism 218
Low-density lipoprotein (LDL) cholesterol, atherogenic form 29
Low density lipoprotein (LDL) receptor deficiency, gene therapy for 205
Luminal surface, molecules mediating adhesion to 15

M
Major body axis formed in vertebrates and invertebrates 21
Maladaptive hypertrophy caused by chronic overload 37
Mean arterial pressure and shape of blood pressure curve 96
Membrane depolarization, transduction of physical force by vascular wall via 7
Meningococcemia, protein C treats 141
Mesodermal cells during outflow tract development 69
Model system for vertebrate development 21
Morphogenesis of cardiac outflow tract and aortic sac regions 69
Mouse embryo, recombinant genes introduced into 211
Mucous secretion, eicosanoid role in 186
Multicellular organisms, heart development of 21
Muscle, cardiac, LCFA uptake and release in 218
Mutation analysis, PCR role (Tutorial) 175
Myocardial infarction, lipoprotein(a) role 225
Myocardial wound repair, osteopontin role 88
Myocardium during outflow tract development 69
Myocytes, cardiac, fatty acid transport protein in 218
Myocytes, cardiac, targeting transgene expression phenotypic effects in conditional transgenics 211
Myogenic response, pressure-induced 7

N
Neointima formation, plasminogen/plasmin system role 117
Neovascularization, plasminogen/plasmin system role 117
Neural crest cells during outflow tract development 69
Nitrates, drug combination including, for heart failure 37

O
Oocytes, fertilized, role in hypertension research 108
Operons, resistance 213
Organ blood flow regulation 7
Osteopontin: molecular and cellular biology of 88
Ouabain-induced arrhythmia, chaos control of 76
Outflow tract development, cell origins and tissue boundaries during 69, (Letter to the editor) 173, (Letter reply) 173
Oxidation converts LDL into atherogenic form 29

P
P300, cardiac cell cycle role 230
Phenotypes, blood pressure curve 96
Phenotypes, hypertensive 108
Phenotypes, protein C 55
Phosphatidylethanolamine, activated protein C anticoagulant activity requires 141
Phospholipase C, transduction of physical force by vascular wall via 7
Phospholipids, membrane-bound, diacylglycerol action on 7
Phosphorylation, and abnormal activation of protein kinase C 193
Phosphorylation, G-protein-coupled receptor 63
Physical force, transduction of by vascular wall 7
Plasma membrane, red cell sodium–lithium countertransport in 102
Plasminogen/plasmin system in thrombosis, hemostasis, restenosis, and atherosclerosis: evaluation in transgenic animals 117
Platelet aggregation, thrombin role 134
Platelets, activated, P-selectin on 149
Pocket proteins, cardiac cell cycle role 230
Polymerase chain reaction (PCR), uses as diagnostic tool for cardiovascular disease (Tutorial) 175
Polymorphonuclear neutrophil chemotaxis, leukotriene- induced, lipoxin inhibition 186
Polyunsaturated fatty acids (PUFAs), eicosanoids as oxygenated products of 186
Procoagulant endothelium, virus role 128

©1995, Elsevier Science Inc.,
1050-1738/95/$9.50 SSDI 1050-1738(95)00111-5

Procoagulatory processes, coagulation cascade role 157
Proliferative response, of atherosclerotic lesion 29
Pronucleus, oocyte, role in hypertension research 108
Protein C, activated and human, anticoagulant properties 55
Protein C anticoagulant pathway: update 141
Protein kinase C (PKC) family: diversity of 193
Proteolytic processes, plasminogen/plasmin system role 117
Proteolytic substrate for thrombin 123
P-selectin, gene knockout on 149
Pulse pressure and shape of blood pressure curve 96

R

Recombinant genes, in transgenic mice 211
Red cell sodium–lithium countertransport and cardiovascular risk factors in essential hypertension 102
Renal hypertrophy, red cell sodium–lithium countertransport role 102
Repressors 213
Restenosis, after balloon angioplasty 200
Restenosis, cardiac cell cycle role 230
Restenosis, osteopontin role 88
Restenosis, plasminogen/plasmin system role 117

S

Semilunar valves during outflow tract development 69
Signal transduction mediates leukocyte migration across vascular intima 15
Simple diffusion, LCFA 218
Skin necrosis, protein C treats 141
Smooth muscle contraction, eicosanoid role 186
Sodium–lithium countertransport, red cell, in essential hypertension 102
Spatial contributions to outflow tract development 69
Spatiotemporal complexity in chaos control of cardiac arrhythmias 76
Stimulus-response coupling, eicosanoid role in 186
"Stop programs", of host defense and inflammation 186
Stroke, lipoprotein(a) role 225
Structure–function relationships, protein C 55
Systolic pressure, peak, on blood pressure curve 96

T

Temporal contributions to outflow tract development 69
Terminal differentiation, cardiac myocyte 37
Tetracycline resistance operons 213
Tetracycline-regulated gene expression in vivo 214
Thrombin, hemostasis maintenance role 157
Thrombin inhibitors, a new generation of antibiotics 134
Thrombin receptors, trafficking 123
Thrombolytic therapy, new antithrombotics for 134
Thrombosis, plasminogen/plasmin system role 117
Thrombosis, protein C anticoagulant pathway role 141
Thrombosis, TFPI for 167
Thrombosis, virus role 128
Tissue boundaries during outflow tract development 69
Tissue factor pathway inhibitor in health and disease 167
Tissue-specific recombination 216
Tissue-type plasminogen activator, evaluation in transgenic animals 117
Total body exchangeable Na^+, red cell sodium–lithium countertransport role 102
Trafficking thrombin receptors 123
Transactivators 213
Transcellular biosynthetic pathways, as leukotriene and lipoxin sources 186
Transcription factors, genes encoding 47
Transduction of physical force by vascular wall: role of phospholipase C and cytochrome P450 metabolites of arachidonic acid 7
Transendothelial migration mediates leukocyte migration across vascular intima 15
Transgenic animal models for hypertension research 108
Transgenic mice, cholesteryl ester transfer protein studies 83
Transgenic mice, conditional 211
Transgenic mice, plasminogen/plasmin system evaluation 117
Transgenic mice, P-selection deficient 149
Transgenic rats, for hypertension research 108
Transmural pressure, elevation in 7
Tree, arterial 96
Triglycerides, cholesteryl ester transfer protein shuttling between 83
Triglycerides, metabolism linked with low HDL levels 83
Truncal cushions during outflow tract development 69
Tumor suppressor "pocket" proteins 230

U

Unstable angina, new antithrombotics for 134
Urokinase-type plasminogen activator, evaluation in transgenic animals 117

V

Vascular injury, TFPI role 167
Vascular intima, leukocyte migration across 15
Vascular roles of lipoxins in "stop programs" of host defense and inflammation 186
Vascular wall, transduction of physical force by 7
Vasculitis, acute, in Kawasaki disease 3
Vasoconstriction, lipoxin inhibition of 186
Vasodilators, two classes, for heart failure 37
Ventricular myocyte regeneration, cardiac cell cycle role 230
Ventricular tissue arrhythmia, rabbit, chaos control of 76
Vertebrates, relationship to *Drosophila* heart development 21
Viruses in thrombosis and atherosclerosis 128
Vitamin K-dependent proteins, role in blood clot formation 55

W

Warfarin-induced skin necrosis, protein C treats 141
Wave velocity and shape of blood pressure curve 96

X

X-ray crystallography, of thrombin interaction with coagulation system components 134

Z

Zymogen form of protein C 55

©1995, Elsevier Science Inc., 1050-1738/95/$9.50 SSDI 1050-1738(95)00111-5